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ABSTRACT

This literature review on the importance of play in the development of children focuses on play differences of exceptional children, methods of observing and assessing play, play interventions, the use of toys and playthings, the role of nonhandicapped peers in play, the physical environment for play, and the role of adults. The paper concludes that play can not only be used to gain assessment information but can also be used to teach and reinforce new skills. Several transparency masters are appended to the paper, including observation forms and information on definitions of play, benefits of play, play skills of disabled children, considerations for direct instruction in play, levels and categories of play, play interventions, characteristics of playthings, arrangement of the physical environment, and levels of adult involvement. (Contains 36 references.) (JDD)

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The Importance of Play in the Early Childhood Special Education Curriculum

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The Importance of Play

Play has intrigued educators, philosophers, parents and theorists for a long time. Although we all can recognize when a child is in play, it is more difficult to define it, explain it, understand its importance and see it in relation to other childhood activities. There are many questions that can be raised regarding play. For example, when is an activity play and when is it work? When does play begin? What happens if children are not allowed to play? What do children learn from play? What are the benefits of children playing?

Despite varying definitions of play there have been a number of elements that seem common to most definitions. These include such things as (a) play being spontaneous, (b) free from rules, (c) involving active engagement, (d) it is intrinsically motivated, (e) it is a means rather than an end, (f) is has a positive affect on the child, and (g) it can occur with people or objects or both. Inherent in these components of the defintion of play is that play is fun.

Many educators and theorists have stressed the importance of play in the development of the child. Play is seen not only as an enjoyable activity but one in which children learn new skills and practice existing ones. Play incorporates all of the developmental domains including language, social, cognitive and motor domains. Froebel (1894) felt that play was a way in which children gain insight into their world and was a means of creative self expression. Vygotsky (1976) suggested that play

was useful in the development of language and thought. Recent work indicates that play may actually increase a child's IQ (Johnson, Ershler, & Lawton, (1982). Axline (1947) indicated that "Play Therapy" is an opportunity for children to work through fears or feelings of inadequacies. Play, according to Piaget (1962), involves both assimilation and accommodation. It is a way of taking information from the world and organizing it. Further, Piaget suggests that play helps to reduce egocentric thought. Odom et al., (1988) indicate that play may increase role playing and social problem solving. Feeney and Magarick, (1984) view play as a way in which chidren learn about the world around them, learn to talk and share, and learn about themselves. Play then, is seen as a way to foster cognitive as well as social development.

In addition, skills learned in structured lessons can be practiced during play. Once skills are learned they need to be practiced and generalized to other situations. Play allows for this practice and generalization. There is a circular relationship with learning and play. As a child plays they practice and learn new skills which will lead to higher levels of learning and at the same time learning new skills in structured sessions leads to higher quality play behaviors.

We should not devalue the importance of play. Play should be an integral part of the early childhood special education classroom. It not only provides a means for children to learn about the world around them and to practice new skills, but it can be used to assess skills in the child's behavior repertoire

or used to teach new skills in a functional environment. Free play periods can often be a time when teachers take a break or catch up on paper work demands. Though time for these tasks is needed, we would suggest that it not be done without adequate preparation for the activities of the play group. It is also important to point out that play activities should compliment not replace other curricular activities (Odom et al., 1988).

Play Differences of Exceptional Children

It is generally accepted that the play behaviors of young children with disabilities is different and less sophisticated when compared to the play of nonhandicapped children. Language impairments, sensory impairments and/or cognitive delays can all impact in a negative way on the play behaviors of young children. Young children with disabilities may not play with either toys or peers appropriately. There is a great deal of information available describing the play behaviors of disabled children. The following information is provided simply as a sample of the available literature and focuses on children with different disabilities.

Play development of hearing impaired children seems to follow the same pattern but slows down with age in relation to normally hearing children (Darbyshire, 1977). Early training, hearing aids and high SES backgrounds were associated with relatively mature patterns of play. Hearing and vision are both important to play, but hearing loss seems to not have the same effect as visual loss.

Profoundly handicapped children showed low levels of toy

interaction and high levels of stereotyped behaviors. When toys were adapted to emit more visual, auditory or tactile stimuli, however, toy interactions did increase (Murphy, Carr, & Callias, 1986). Fraiberg (1977) found that blind children showed more repetitive stereotyped play with their own bodies. They also showed delayed development of play with objects and consistent delays in symbolic play. Sigman and Ungerer (1984) indicated that autistic children demonstrated fewer play sequences, less duration and diversity of more advanced play skills and less play with dolls. Rogers-Warren, Ruggles, Peterson, and Cooper (1981) indicate that handicapped children tended to prefer time in more structured areas of the classroom whereas nonhandicapped children tended to prefer more unstructured areas. Two types of difficulties related to social interactions were noted, increasing a low rate of a preexisting behavior and/or increasing interaction skills when they were completely absent.

Another interesting finding reported by Wing et al. (1977) is that children who displayed symbolic play were those who had a language comprehension age of 19 months or above. Those children with language comprehension ages of below 19 months did not engage in symbolic play behaviors.

Because young children with disabilities may not play or play appropriately, it often means that they must be taught how to play. Although not discussed as one type of play intervention described below, it is clear that many of these young children need to be taught both how to play with toys and/or how to play with other children. Direct instruction in play or social skills

will be required. The type of instruction provided will of course depend on each individual child. Some children may have some play skills that simply need to be increased, whereas other children will need to be taught a new play behavior. Modeling, shaping and positive reinforcement would all be useful in teaching new play behaviors. Play skills should be included as IEP goals and could be taught either in structured sessions or as part of a free play group. Bailey and Wolery (1984) indicate that there are many different cognitive and social skills that will need to be taught. These include smiling, sharing, imitating contacts, taking turns, and specific skills in using or manipulating toys.

Observing and Assessing Play

In the last 20 years a significant amount of information has become available regarding observing and assessing play. Part of this work has focused on observing play to identify specific play skills while other work has focused on observing play to assess such areas as social skills or language. The Symbolic Play Scale (Westby, 1980) is an example of a tool designed for the language and cognitive areas. Linder's (1990) Transdisciplinary Play-based Assessment is an example of efforts to promote observing children in play to gain assessment information on children's language, motor and social skills.

No normed referenced assessments for play are available (Wolery & Bailey, 1989). The instruments that have been developed thus far rely on formal observations to collect information on play behaviors. These observation instruments

vary in what behaviors are being observed. Some focus on toy usage while others focus on social interactions among children. Parten's (1932) early work in defining social play categories has provided a foundation for many of these observation instruments. She established 6 categories of social play including: unoccupied, solitary, onlooker, parallel, associative, and cooperative. Categories of play as discussed by Piaget (1962) and Smilansky (1968) have also been used.

Piaget (1962) outlined three different levels of play. The first called Practice Play occurs in the Sensorimotor period from roughly birth to 2 years of age. The second stage Symbolic Play occurs during the Preoperational stage and is reflected by an increase in pretend play and dramatic play. The third stage is what Piaget called Play with Rules. In this stage children have a greater understanding of rules and games. They are able to play games with clearly defined rules or invent their own.

Smilansky (1968) outlined four categories of play including: (a) Functional, (b) Constructive, (c) Dramatic, and (d) Games with Rules. These categories are similar to Piaget's but includes a dramatic play category that involves sociodramatic play activities.

Before examining some observation forms it is important to point out that to conduct quality observations some training and practice is in order. It is important to look for some specific behavior(s) and not just observe children in a casual manner. Because we all tend to see things differently it is also important to conduct interobserver reliability checks. This

ensures that two or more individuals are seeing the same behavior at the same time.

Most play observation instruments make use of a time sample technique in which children are alternately observed for a specified period of time and then information is recorded. These time samples have ranged from 6 seconds up to 30 seconds or even one minute intervals. Children are observed in free play settings and observers generally observe one child at a time. A variety of observation instruments are described by Wolery and Bailey (1989) and Johnson, Christie, and Yawkey (1987).

Play Interventions

Given the differences in the quantity or quality of play exhibited by young children with disabilities discussed earlier, what can be done to increase the play skills of these young children? In general, there seems to be four different strategies, used either individually or in combination, that can be used to increase the play skills of young disabled children. These four strategies include: a) toys and playthings, b) nonhandicapped peers, c) the setting, and d) the role of adults. Although these four general areas of play intervention are examined separately, they are interrelated and in practice would be used in combination.

Toys and Playthings

Toys and playthings are of course a natural part of children's play. Froebel (1894) and Montessori (1967) both recognized the importance of materials in children's activities. By manipulating objects children develop visual discrimination, eye-

hand coordination and develop a concept of objects and classification skills (Ross, 1982). Toys have been a part of children's play for centuries. An interesting discussion of the history of toys has been written by Fraser (1966).

Chance (1979) makes a distinction between toys and playthings in that toys are miniature replicas of real objects whereas playthings can be any object that a child plays with. Toys and playthings, however, can have distinct characteristics. Chance describes several different dimensions of how toys and playthings can be classified or described. These include 1) how realistic they are, 2) the degree of structure, 3) degree of novelty, 4) degree of participation, and 5) responsiveness.

Examining and evaluating toys based on Chance's classifications can help us choose the most appropriate toys for children to play with. For example, younger children, who have not yet reached a level of symbolic representation, may prefer more realistic toys. Further, some realistic toys may help promote a level of dramatic play which was not previously observed. Structure of toys will be tied to versatility. Unstructured toys and playthings such as blocks, clay and sand may be perferrable for some children because they require more of the child. There is some indication that children who are good at pretend play and are highly imaginative tend to prefer unstructured toys. Novelty is also a part of toys and playthings. The novelty of some toys can fade and toys will no longer being interesting. Combining unrelated toys, however, may help to foster original thinking. Many children seem to do this

naturally which may account for the odd assortment of toys that may accumulate in a play area. Responsive toys also are good in that they can teach consequences. A ball, for example, is an unstructured toy that is highly responsive.

Important for young children with disabilities is the influence of social vs. more isolate toys. There are indications that the type of toys of playthings made available to children may encourage either social or isolate play behaviors (Beckman & Kohl, 1984; Martin, Brady, & Williams, 1991). If a goal is to increase social behaviors of children then one strategy would be to provide social toys. We are currently involved in a research study on the use of social vs. isolate toys. Twenty-four nonhandicapped and handicapped children ranging from 3-5 years of age in two different sites are participating. Preliminary results from this study support the findings of previous research in that social toys tend to promote more social behaviors than do isolate toys.

A sufficient quantity and variety of toys and playthings should be available (Ross, 1982). Materials that cross developmental domains as well as developmental ages would be preferable. For example a medium sized ball may be used to promote large muscle movements, but having two children bounce the ball to each other would promote social interactions. The toys and playthings selected should also reflect cultural diversity.

Fewer toys rather than more toys may influence more social interactions among children. Rubin and Howe (1985) indicate that

reducing the number of toys available may serve to increase social play. Wolery and Bailey (1989) indicate that social materials should be available and limited in number when assessing social play.

Accessibility to play materials is also important. Play materials should be easy to reach and put back. Color coding materials may assist some unskilled children in finding and replacing materials (Rogers-Warren, (1982). Sufficient color contrasts or accessibility by wheelchairs would be important for visually impaired or physically disabled children. Stabilizing a toy, creating boundaries to restrict the movement of toys and grasping aids such as a Velcro strap may all assist a child with Cerebral Palsy play with toys more effectively (Schaeffler, 1988). Toys also need to be attractive, well constructed, durable and safe (Feeney & Magarick, 1984).

The Role of Nonhandicapped Peers

Much of the literature and information in this area is related to the social integration literature. The basic idea behind this approach is to make use of nonhandicapped children as peer models. Odom et al. (1988) in their Integrated Preschool Curriculum provide an example of efforts to involve nonhandicapped peers in the play behaviors of young children with disabilities. The goal of this program is to promote and increase the interactions between nonhandicapped and handicapped children. Though making use of nonhandicapped peers the curriculum also makes use of materials and some teacher assistance. Odom et al. (1990) and Strain, Smith, and Storey

(1990) also discuss strategies for increasing play and social skills with the involvement of nonhandicapped peers.

The Setting

The setting refers to the physical environment and includes such things as the amount of space available, materials that are present, and how the space and materials are arranged (Johnson, Christie, & Yawkey, 1987).

Smith and Connolly (1980) provide some interesting information regarding the play setting. This information is related to spatial density, that is how much play space is available for children. The size of the area available for children to play in as well as how many children are in a given area may influence in either a positive or negative way the play behaviors of the children. Based on their studies and reviews of others, Smith and Connolly suggest that 25 square feet per child should be the minimum play space available.

How the classroom is arranged is important and may contribute to certain behaviors on the part of children. Walling (1977), for example, indicated that by rearranging the classroom certain changes in behavior were noticed. In the original setting children were aggressive and rowdy during free play, with a rearrangement of the classroom these behaviors were reduced. Some of the problems identified were that there was no clear pathway through the room, there was too much open space, and some adjacent areas which were either noisy or quiet were in conflict with each other. Repositioning tables and relocating several play areas resulted in more positive child behaviors.

Housekeeping and block play areas tend to produce high levels of social play. Theme areas also produce more sociodramatic play (Johnson, Christie, & Yawkey, 1987).

The Role of Adults

A good discussion of the role and importance of adults in the play of young children is discussed in Johnson, Christie, and Yawkey (1987). They provide information on four different types of involvement by adults in children's play. The first of these types of involvement is called parallel play. In this level the adult plays with the same play materials as the child, but does not really interact or direct the children. In a sense the adult is simply taking the role of another child playing beside the children. This can assist in keeping children on task for longer periods and may provide a sense of security for some children. The second type of involvement is called co-playing. In this level of play the adult takes more a directive role. The adult is still just playing with the children, but asks questions, makes comments that can serve to broaden children's awareness and ideas. The third type of involvement is call play tutoring. In play tutoring, the adult takes a much more dominant role providing guidance and instructions. This is much more of a teaching mode, with instructions and modeling being provided to enhance the play skills of the children. For more severely involved children with disabilities this may be one of the more frequently used types of involvement. The fourth type of involvement is called spokesman for reality. This level of involvement is probably geared more at older or higher

functioning children. Its focus is to show relationships, consequences and to bring play back to reality for children.

It is important to know when to be involved in childrens play and when to back off. In some instances adult involvement or interaction may actually disrupt the play of children. We need to encourage higher levels of play but yet not involve ourselves too much. The presence of adults may serve to increase adult-child interactions and decrease child-child interactions. A report related to this by Shores, Hester and Strain (1976) focused on the effects of teacher involvement on teacher-child and child-child interactions. Shores, Hester, and Strain found that child-child interactions were highest in a teacher structured situation and lowest in a active teacher involvement situation. In the teacher structured situation, teachers provided activities and encouraged children to role play but did not interact with children. Findings were consistent with other studies that when teachers are available for interaction children tend to interact with teachers rather than with peers. This may be due to the fact that adults are more likely to consistently respond to children's social interactions.

Summary

In conclusion, play can be an important part of a early childhood special education curriculum. It can not only be used to gain assessment information but can also be used to teach and reinforce new skills.

Elements Common to Definitions of Play

* Spontaneous
* Free From Rules
* Active Engagement
* Intrinsically Motivated
* Means Rather Than An End
* Positive Affect
* Can Occur With People Or Objects

BENEFITS OF PLAY

Means of Creative Self-Expression (Froebel, 1894)

A Way to Work Through Fears, Uncertainties, and Emotions (Axline, 1947)

Useful in Development of Language and Thought (Vygotsky, 1976)

Provides a Challenge, Contributes to Social, Cognitive, and Physical Development (Chance, 1979)

Helps to Reduce Egocentric Thought, Involves Assimilation and Accommodation (Piaget, 1962)

BENEFITS OF PLAY

Certain Types of Play May Increase IQ's (Johnson, Ershler, and Lawton, 1982)

Develops Visual Discrimination, Eye-Hand Coordination, Object Concept, and Classification Skills (Ross, 1982)

Increases Role Playing and Social Problem Solving (Odom, et al., 1988)

Children Learn About How Things Work, Learn to Talk and Share Ideas, Increase Ability to Concentrate, and Learn About Themselves (Feeney & Magarick, 1984)

Contributes to Cognitive Skills Including Conservation, Creativity, and Problem Solving (Johnson, Christie, & Yawkey, 1987)

Disabled Children and Play Skills

* Limited repertoire of play skills
* Limited selection of materials
* Engage in more solitary play and less social play
* Limited attention span
* Less play with objects and more stereotyped play with own bodies
* Tend to prefer more structured play areas
* Consistent delays in symbolic play
* Less language use during play
* May spend more time aimlessly moving around
* Symbolic play only when language comprehension age is above 19 months (Wing et al, 1977)

Considerations for Direct Instruction in Play

* Included as specific IEP goals/objectives
* Should compliment not replace existing curriculum
* Will involve toys, peers, and/or adults
* Taught directly in structured lessons or in free play
* Will involve modeling, shaping and positive reinforcement
* Will include specific skills such as:

    Smiling
    Sharing
    Turn Taking
    Using or Manipulating Toys
    Initiating and Responding to Peers

PARTEN'S LEVELS OF SOCIAL PLAY

Unoccupied

Solitary

Onlooker

Parallel

Associative

Cooperative

Piaget's Levels of Play

* Practice Play

* Symbolic Play

* Games with Rules

Smilansky's Categories of Play

* Functional Play

* Constructive Play

* Dramatic Play

* Games with Rules

FORM B

Child: Eddie
Date: 8/1/82
Time: 9:00 - 9:30

Description of environment: Block and toy centers in classroom

Observer: DB

Exploratory play				Toy play						
Orientational responses	Locomotor exploration	Perceptual investigation and manipulation	Searching	Repetitive manipulations/oral contacts	Pounding/ through pushing pulling	Personalized toy use	Manipulation of movable parts of toys	Separation of parts of toys	Combinational use of toys	Other
Looks at visual changes in environment HHT I Responds to sounds III	Moves to another area of center III	Rubs carpet II	Looks for rattle II	Shakes rattle HHT Bangs block on floor III	Pushes car I					
9 Total number	3	2	2	8	1					
36 Percentage of behaviors	12	8	8	32	4					

Notes:

Favorite objects: Rattle, blocks

Any interactions with peers? None

FORM C

Child: Eddie
Date: 8/3/82
Time: 9:00 - 9:30

Description of environment: Block and toy centers

Observer: DB

	Touches	Grasps	Holds	Carries	Shakes	Pounds	Squeezes	Pushes	Pulls	Turns	Other
	II	III	I	II	IIII IIII	I		I	I		
Total number	2	3	1	2	9	1		1	1		
Percentage of behaviors	10%	15	5	10	45	5		5	5		

Notes:

Favorite objects: Rattle, blocks

Any interactions with peers? None

From Wolery, M. and Bailey, D. (1989).

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OBSERVATION FORM FOR SOCIAL INTERACTIONS

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Child: _____ Observer: _____

Date: _____ Reliability: _____

Minutes	Count in Area			Type of Play				
	Non.	Hand.	Teach.	No	Onlook	Solitary	Parallel	Coop.
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Observation Scale for Social Interaction

Date:_____

Intervention_____

Child:_____ N H

Observer:_____

Reliability:_____

Group count

Beginning:	End:
N____	N____
H____	H____
A____	A____

	Play area								Area count			Behaviors								
												Play				Init.		Response		
	Housekeeping	Sand and water	Blocks	Quiet/books	Manipulatives	Art	Computer	Miscellaneous	Non-handicapped	Handicapped	Adult	Unoccup.	Solitary	Coop.	Adult Interaction	Positive	Negative	Appropriate	Inappropriate	No
1																				
2																				
3																				
4																				
5																				
6																				

OBSCALE.4

Sheet No. ____
Verified ____

OBSERVATION SCALE FOR SOCIAL INTERACTION

DATA COLLECTION FORM (Playground Adaptation)

Nancy L. Peterson (1979)

Primary Observer: _____
Secondary Observer: _____
Child: _____
Observer: _____

Class Attendance
M _____
T _____
W _____
Th _____

Date _____
Condition ____

	A PLAY AREA													B COUNT IN AREA			C INTERACTION						D	E	F SPECIAL INCIDENCE	
																				Cooperative					Phys.	
														Normal	Special	Teacher	No Play	Solitary	Parallel	Coop.	Phys.	Inst.	Time Out	Teacher Inter.	▲	▲
1																										
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										

Play Interventions

Four general ways to improve the play behaviors of young children.

* Toys and Playthings

* Nonhandicapped Peers

* The Setting

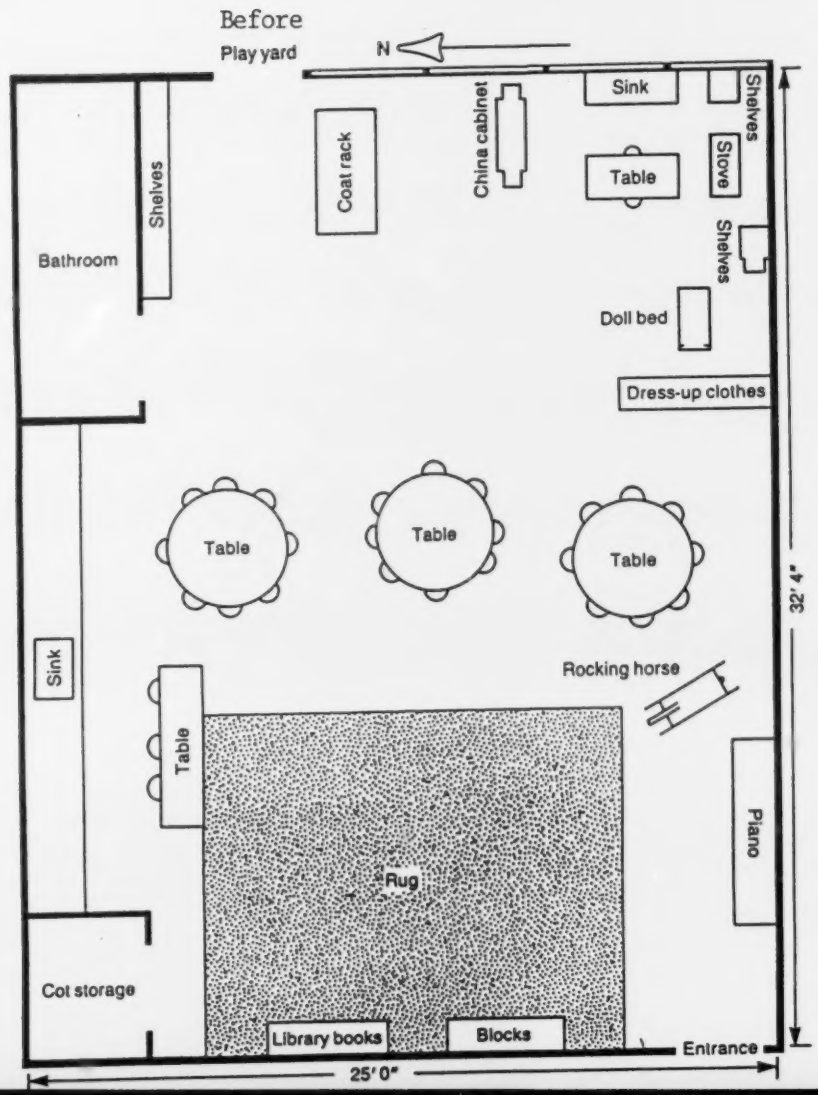
* The Role of Adults

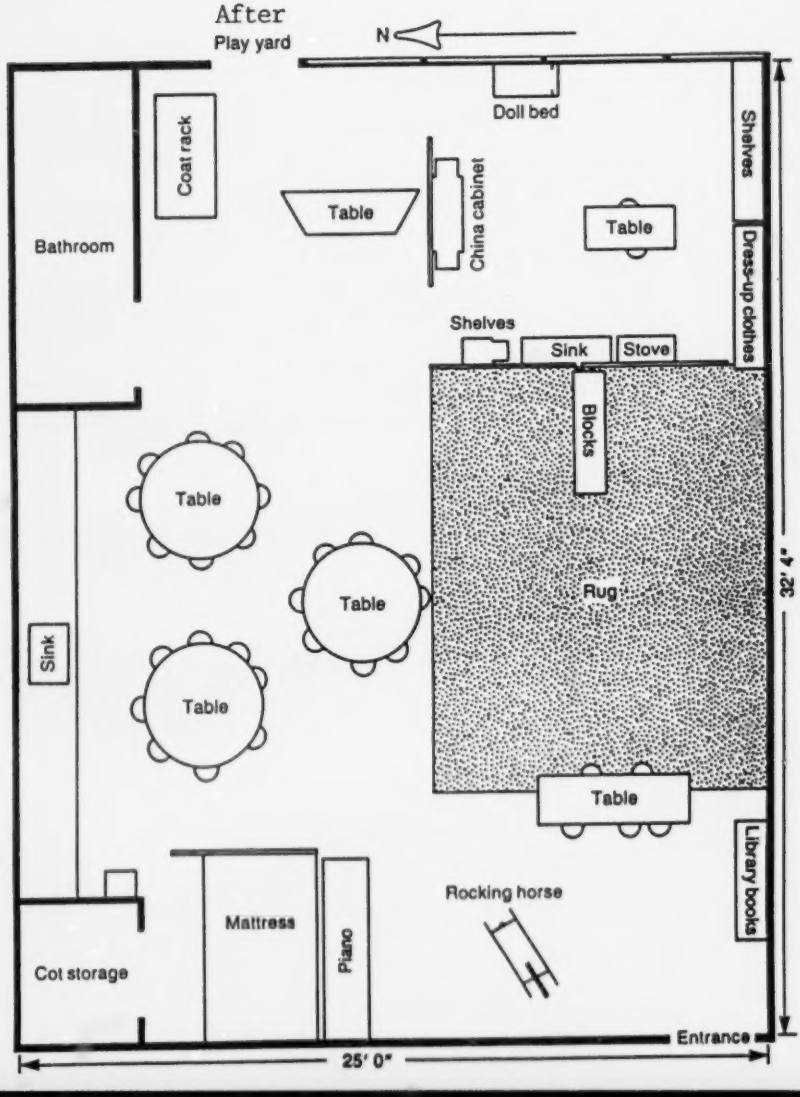
Chance (1979) Characteristics of Playthings

Considerations is comparing and evaluating toys and playthings

* How realistic they are
* Degree of Structure
* Degree of Novelty
* Degree of Participation
* Responsiveness

Walling (1977)





Levels of Adult Involvement

(Johnson, Christie, & Yawkey, 1987)

* Parallel Play

* Co-Playing

* Play Tutoring

* Spokesman for Reality

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